

ICBS-R Frequently Asked Questions

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OVERVIEW:

What is ICBS?

The “Interagency Cache Business System” is an inventory management system used by NFES National Interagency Support Caches. ICBS is a customized version of a commercial-off-the-shelf product called Sterling Warehouse Management System® (WMS). ICBS replaces a legacy “ICBS” Oracle Forms® application system – first deployed in 1999 – as well as other inventory management systems used in local area and national caches.

Why was the “legacy ICBS” application “re-engineered?”

The three key reasons for re-engineering ICBS were:

- To move to a system architecture that will allow the application to be used at local area caches so that the overall national cache inventory system could be utilized more efficiently;
- To meet essential cache business needs (e.g. improved reporting, ability to interface with other systems, etc.)
- To exchange data with the Resource Ordering and Status System (ROSS)

What is ICBS-R?

“ICBS-R” refers to the ICBS Re-engineering Project, which was chartered by the National Wildfire Coordinating Group in March 2003 to accomplish the above system re-engineering goals.

IMPLEMENTATION SCOPE:

Which caches will use the re-engineered application?

All national, local area and remote caches meeting National Fire Equipment System (NFES) standards are within the implementation scope of the ICBS-R Project.

The following are the thirteen national caches:

- Rocky Mountain Area Incident Support Cache
- Southwest Area Prescott Incident Support Cache
- Southwest Area Silver City Incident Support cache
- Southern Area Incident Support Cache
- Northeastern Area Incident Support Cache
- Northern California Incident Support Cache
- Southern California Incident Support Cache
- Northwest Area Fire Cache
- Northwest Area -Wenatchee Satellite Cache
- Northwest Area - LaGrande Satellite Cache
- Northern Rockies Area Incident Support Cache
- Great Basin area Incident Support Cache
- Alaska Incident Support Cache

In early 2007, the ICBS-R Steering Group designated the following local area caches (LASCs) as the “priority” facilities for initial implementation of the new ICBS:

- Coeur d’Alene Interagency Fire Cache
- Billings Fire Cache
- Arkansas/Oklahoma Interagency Fire Cache
- Alaska State Fire Warehouse
- Eastern Idaho Interagency Fire Cache
- Elko District Fire Cache
- Las Vegas Fire Cache
- South Central Idaho Fire Cache

In light of parallel “Cache Strategic Plan” activities that are likely to change the makeup of the nationwide cache system, the Steering Group is expected to review and possibly modify this list of LASCs before the Project Team begins implementing them.

Initial attack caches (or “local caches”) are not targeted for using the re-engineered application.

What is a national interagency support cache?

According to the NFES Cache Management Plan (please see ICBS-R “Project Reference Materials” link on project website), a national interagency support cache (also called “national cache” or “geographic area cache”):

- Is the primary servicing Cache for a specific established Geographical Area as defined in the National Interagency Mobilization Guide.
- Serves multiple customers across governmental, agency, administrative and geographical boundaries.
- Follows established NFES standards in operating procedures (SOP), refurbishment and kit configurations.

There are eleven national caches in the NFES system, including two satellite cache locations of the Northwest Area Cache (in LaGrande, OR and Wenatchee, WA). The Alaska and Great Basin Caches are hosted by the DOI Bureau of Land Management. All other national caches are hosted by the USDA Forest Service.

What is a local area support cache?

According to the NFES Cache Management Plan, a local area support cache (“LASC” or “local area cache”):

- Provides direct support to more than one agency and generally covers more than a single administrative management unit within a Geographic Area. Boundaries are determined by the cooperating agencies and agreements.
- Follows established NFES standards in operating procedures (SOP), refurbishment and kit configurations.

The NWCG Fire Equipment Working Team (FEWT) has designated twenty-one current local area caches, hosted by a variety of federal and state NWCG agencies.

What is a remote cache?

According to the NFES Cache Management Plan, a remote cache:

- Is a cache established on a temporary basis, to meet extraordinary supply logistics needs. As an extension of a national cache, the servicing cache provides program oversight.
- Is managed by qualified personnel from national caches.

What is required in the new ICBS to stand up a remote cache?

When remote caches are established, a new cache organization can be built relatively quickly in the new system as a generic copy of a national cache (i.e. using the “high volume” ICBS template). Once computer and network equipment are installed, shelving is labeled, networked printers configured and installed, and the facility is staffed and stocked, it can be up and running. This is very similar to how remote caches have been activated in the current ICBS system.

This has not yet been attempted, however, so the actual timeframe and effort required to do this are currently untested. If wireless bar code scanning is desired (for a remote cache that is expected to be used for a long period of time), several additional steps would need to be completed (e.g. install wireless local area network – WLAN, obtain scanning guns and network access accounts, networked label printers, etc.).

What is an initial attack cache (or “local cache”)?

According to the NFES Cache Management Plan, an initial attack cache:

- Generally provides single agency support to one administrative unit. It may provide interagency support based on local agreements.
- Cache inventory mainly is restricted to local use only and is not generally available for large-scale mobilization.

Initial attack/local caches are not within the implementation scope of the ICBS-R Project.

FOUNDATION PRODUCT:

Was the new ICBS built from scratch or is it based on a commercial product?

The application is based on a commercial-off-the-shelf (COTS) product known as Sterling WMS (Warehouse Management System)® 7x.

What other enterprises rely on the Sterling WMS® product?

Well known Sterling WMS® clients include: FedEx, DHL, Target, Northrup-Grumman, Sysco, Lockheed-Martin, Motorola, Cabelas and Texas Instruments.

Why was a commercial off-the-shelf (COTS) application chosen to replace the existing ICBS?

All federal departments and agencies are required to evaluate and consider COTS (and Government off-the-shelf GOTS) applications before building any new information technology systems. For that reason, the ICBS-R design solicitation was open to both approaches: develop from scratch or COTS/GOTS approaches.

The commercial grade COTS Sterling WMS® product was selected by an interdisciplinary panel to replace the current ICBS. Extensive business requirements and design work was completed to identify the customization needed for the Sterling WMS® product to meet the cache system’s unique requirements. Design, product customization, testing, and implementation support work was, and is, being performed by Sterling Commerce under a GSA task order awarded to Manugistics Corporation (now JDA).

Is the application re-engineering work being done in-house or by a commercial vendor?

This work is being performed by a commercial software vendor (Sterling Commerce®) in collaboration with an interagency group of ICBS-R Team government cache subject matter experts (SMEs).

Who is responsible for modifying the Sterling WMS® application to meet the needs of the cache community?

A Sterling ICBS-R Project Team, which is part of Sterling Commerce®, is responsible for the design and customization of the COTS product. The Sterling Team, under the leadership of Project Manager Chad Hooker, works very closely with the government’s ICBS-R Project Team to ensure the cache community’s specific needs are incorporated in

the customized product. Actual custom configuration and development work began in May 2006.

Will the customized application need to be rewritten when future versions of Sterling WMS® are released?

There could be a small number of system parts that will require some programming work in order to carry over in future COTS upgrades. But, to the extent possible, the Sterling team modifies the Sterling WMS® product in such a way as to avoid the need for future programming work when the COTS application is upgraded.

FEATURES AND FUNCTIONALITY:

What features and functions does ICBS have?

The core Sterling WMS® product has a lot of inherent capability that most of the current cache applications it replaces didn't have. The most significant of these are: Automated Identification Technology or "AIT" (which means the ability to perform warehouse activities with a bar code scanning devices); discrete location level inventory (for real-time shelf-level accuracy); user-defined or "Ad Hoc" reporting; and a host of built-in logic that help cache managers optimize their warehouse operations.

What's the key difference between current systems and the new ICBS?

A significant aspect of the new ICBS is that the national cache system is transitioning from numerous distributed databases and systems to a single centralized automated system. Once most of the caches are on the new system, the cache community will realize increased system-wide efficiencies. However, to fully realize the benefits of the new system, this requires even more standardization than the caches have previously had to implement (e.g. numbering, nomenclature, kit configuration, packaging, operational practices, etc.).

Will this be a big transition for the caches?

Because of the centralization, application logic and the AIT component, this is a very big transition. Making the shift to the new system will not always be easy or comfortable for cache personnel used to doing things "their own way."

The Sterling WMS® product has been configured to support current cache processes with an eye toward introducing additional functions that support warehouse best practices in future phases. So, although there will be big changes, we're not trying to accomplish them all at once.

Since the system "tells" an individual what item to pick and what location to pick it from, does it also direct them to pick the heavy items first to place on the bottom of the pallet?

The system will not direct the users to put heavy items on the bottom of the pallet, but there are strategies that cache managers can use to lay out their cache to facilitate this (e.g. storing heavier items in lower-numbered locations within a storage zone). This strategy also works for heavy, bulky or flat items.

Does the person pulling the order have to pick from the location that ICBS designates?

The user *can* always override the suggested location for picking and put-away tasks, but if the warehouse is laid out correctly, the user will find that they system should send them on the most efficient path to pick and put away items.

Does the re-engineered system resemble the current ICBS application?

The re-engineered application supports current cache processes, but the screens that users see are Sterling WMS® screens modified as necessary for the cache community. Users have not expressed a great deal of frustration with the different screens as long as they can grasp the processes involved. Moving to a more centralized architecture; AIT technology; and exchanging data with ROSS and other systems requires new screens and processes that don't exist in the current ICBS application.

How will a single application work for the largest national cache and the smallest local area cache?

A high volume template of the new system is being used by the national caches and the largest and busiest of the local area caches. In order to accommodate the needs of the smaller/less active local area caches, the ICBS-R contractor will develop a “low volume” template.

What has the ICBS-R Team done to ensure the product will meet the needs of the local area caches?

The team has done several things:

- During the business requirements phase of the project, 3-person teams of cache personnel visited a number of local area caches and documented their processes and requirements for an automated warehouse management system.
- The ICBS-R Project Team recruited two team members who are fulltime local area cache employees. These team members provide input on a continuous basis as members of the ICBS-R Business Requirements Team, and will be very involved in application beta testing. One is also the leader of the ICBS-R Implementation Team.
- Each ICBS-R Team Member is responsible for reaching out to local area caches and serving as a project point of contact for information dissemination and responding to questions.

In May 2006, personnel from seven local area caches visited the ICBS-R “demonstration cache” to learn about the new system and to participate in a focused one-day local area cache requirements session. Users gave the team positive feedback on the prototype and expressed a desire to use the new system.

PROCESS STANDARDIZATION:

Does the new ICBS require standardization of business processes from one cache to the next?

The ICBS-R project team recognizes that business processes vary from cache to cache. Because we're moving to a centralized data base to be shared by all caches, some business process standardization is necessary.

The project team has identified opportunities for standardization throughout the design process so that the national cache managers and project sponsors can implement standard processes wherever possible. Some variance is necessary due to different agency requirements. These are being accommodated in the new system on a case-by-case basis.

What about standard warehouse zones?

The COTS Sterling WMS® comes with extensive built-in logic. A number of “zones” within a warehouse are built into Sterling WMS® - each having specific functionality and relationships with other zones (e.g. Storage, Bulk Storage, Returns, Receiving, Shipping, etc.). The inherent logic determines how products move between zones in the warehouse.

The ICBS-R Business Requirements Team and the national cache managers worked together and developed a standard set of zones to best fit the needs of the caches. This common set of zones – some customized for the cache system (e.g. “Medical”) –enable the application to be implemented as expediently as possible at each cache, without the need for custom programming at each site. If a cache has a unique requirement for a zone that a standard zone won't satisfy, it can be configured as part of the implementation process at that cache, but that has not been necessary at any cache implemented so far.

What about a standard location numbering scheme?

A couple of benefits to using a standard location numbering scheme across at all caches are: less variation results in quicker implementation at each cache, and cache personnel will be familiar with the location numbering scheme when they take assignments at other caches (since there currently is no standard scheme in the cache community). The ICBS-R Business Requirements Team and the national cache managers have adopted a standard numbering scheme for the caches and have used it at each cache that has been implemented. It allows for the different shelving, building configuration and other factors that vary from site to site.

What's the importance of the location numbering?

An example of the Sterling WMS® built-in logic is that it optimize the picking (and put-away) of orders/items by determining the shortest picking/put-away sequence in the facility. This is done through inherent algorithms that run behind the scenes in the application. In essence, the locations that are closest to the shipping area in each cache zone are typically identified by the smallest numbers.

How are location numbers derived at each cache?

In order for the system to function correctly, storage and bulk storage locations will be identified by an eight-digit number following a zone identifier (e.g. STOR1-10030203, referring to Aisle 10; Bay 03; Level 02 and Bin 03). This system was approved by the National Cache Managers for the new ICBS in 2006.

Some of the other types of locations (e.g. shipping, returns, etc.) are numbered somewhat differently based on the particular needs of the zone (e.g. SHIP-SORT 1; RET-1; etc.).

What's the process for entering a specific cache's locations into ICBS?

When the new ICBS is implemented at each cache, project team members assist cache personnel in laying out the location scheme. In some cases, items that are shipped most often are moved closer to the shipping area in lower numbered locations. Or, if pallets are usually built with heavy, bulky or flat items at the bottom it might be advantageous to move these items closer to the shipping area so they'll be sequenced first in typical picking tasks.

Can a warehouse worker make a pick other than at the location the system suggests?

Yes, a user can always override the task sequence generated by the system, but setting up and labeling the locations in a standard way helps the system do a better job of suggesting the best picking or put-away order.

TERMINOLOGY:**Will terminology in the new ICBS be the same as that in the current ICBS?**

Users of the new system will include current cache personnel who use a variety of applications (ICBS, InProTrak, Cache Tracker, WRAP, to name a few), and terminology is not consistent between these applications today. The ICBS-R Business Requirements Team has become familiar with the commercial sector warehouse management terminology found in Sterling WMS® and has tried to strike a balance between embracing more industry-standard terminology vs. using terms that are more relevant to the cache community as a whole.

Cache terminology has been used wherever possible; especially in cases where the team has determined that a term or acronym in Sterling WMS® will present a significant barrier to comprehension by cache users. The Sterling Team has advised the ICBS-R Project Team of those cases in which industry terminology is "hard coded" into the system. In these situations, changing a term throughout the application would be extremely cost prohibitive and would affect whether or not future releases of the COTS Sterling WMS® product would require rework in order to retain customizations made specifically for the cache community.

Several cache personnel have pointed out that different terminology has been adopted each time a new application has been implemented in the cache community, therefore making the transition will not be a big obstacle for system users.

How can I familiarize myself with terminology that is new to me?

A terminology reference is included in the self-directed eLearning tool, is used for training. The terminology used in the application, as well as a lot of cache terminology that might be helpful for new cache employees, is posted on the ICBS-R website as part of the online “ICBS eLearning” tool: <http://icbs.nwcg.gov/Traininig/elearning/>

By clicking a “Learn the Terms” link on the eLearning page, users will find a “Job Aid” with a document listing this terminology, as well as a “Let Me” button that allows the user to test their knowledge by completing an interactive puzzle.

USER ROLES:

What roles will users have in the new ICBS?

Roles are called “user groups” in the new ICBS. User groups restrict and enable the permissions of the user belonging to that group. Several user groups are defined in ICBS for both the NWCG enterprise level (i.e. system-wide) and at the cache level (i.e. for a particular cache).

The following is a description of the current user groups in ICBS. The National Cache Coordinator position would likely be assigned to the “Cross-Cache Inventory” and “NISCC Inquiry (Reports)” user group, to enable them to perform all of their duties:

User Group	Org. Level	Permissions	Configurator Access?
NWCG System Administrator	NWCG	Add/modify/delete rights to high level business rules, customers and units, process model and user profiles	Yes
NWCG Catalog Administrator	NWCG	Add/modify/delete access to item master only.	Yes
Cross-Cache Inventory	NWCG	View access to cache-wide inventory	No
NWCG Inquiry (Reports)	NWCG	Read/write access to all reports screens	No
Cache System Administrator	Cache	Read/write access to all cache-level configuration – including user profiles	Yes
Supply Tech	Cache	Add/modify/delete access to transaction screens including all orders and issues	No
Order/Issue Entry	Cache	Add/view access to orders/issues	No

User Group	Org. Level	Permissions	Configurator Access?
Cache Manager or his/her designee (e.g. assistant cache manager)	Cache	View access to all cache-level screens and cache-level configuration	Yes
Receiving Supervisor	Cache	Read/write access to receiving screens	No
Shipping Supervisor	Cache	Read/write access to outbound screens	No
Supply Supervisor	Cache	Read/write access to inventory screens	No
Procurement Supervisor	Cache	Read/write access to inbound screens	No
Cache View-Only	Cache	View access to cache-level screens	No
Cache Mobile User	Cache	Read/write access to mobile consoles (AIT devices). Ad Hoc Move/Force Move ability would be restricted	No
Help Desk User	NWCG	Read/write access to NWCG screens	Yes

Will any users have multiple roles?

Many users belong to more than one group and therefore have various permissions within the new system.

Some users, particularly those involved in administering the system or data at the NWCG or cache level, will need to be trained in the use of Sterling WMS® Configurator in order to perform their role(s). This is a tool that allows a user to make changes to the program without having to be a Java programmer, and is used for changing settings such as: locations, zones, inventory rules, etc.

REPORTS and QUERIES:

Does the new system have the same standard reports that the current ICBS has?

Yes. In collaboration with legacy ICBS and InProTrak report users, ICBS-R Business Requirements Team analyzed each existing ICBS and InProTrak report. They determined which ones needed to be recreated in the new system; were not being used and were not needed; and those that were recreated in the new system but with changes. In some cases, two or more legacy system reports have been combined into one report that can be used for multiple purposes.

In addition to these specific cache reports, users also have a number of “out-of-the-box” reports that have proven valuable to other Sterling WMS® users in the commercial sector.

Will I be able to build custom reports in the new system?

Yes, users have an interface that allows them to build their own “ad hoc” reports through the use of the Cognos® report writing tool. If desired, users can save these reports and run them whenever needed.

How will future standard reports be built?

A few “super users” of the system will be offered additional training in Cognos reporting so they can develop standard reports that can be used by all ICBS users.

What sort of queries can a user perform in the new system?

Sterling WMS® has extensive inherent search and query capabilities.

CACHE HARDWARE, LICENSING AND NETWORKS:

What sort of hardware will caches need to provide in order to use the new system?

A cache or its host agency will need to provide one or more suitable Pentium® PCs from which the user will access a host server at the National Information Technology Center (NITC). The project has published a document outlining computer specifications: http://icbs.nwcg.gov/Documentation/6610_icbsrHardwareSoftwareRequirements2006_0825.pdf

Greater real-time inventory accuracy can be gained if system users input data for some warehouse processes (e.g. kit building) via a PC in the warehouse, rather than making notes on a system-generated form for later input by a supply technician in the office. For this reason, some caches should consider adding a PC in the warehouse area if they don't have one now.

What is the issue of “Windows 2000 PCs and the legacy ICBS system?”

The legacy ICBS is certified to operate on computers with Windows 2000 operating systems, but not on later versions (i.e. Windows XP). The FS and BLM have been replacing Windows 2000 PCs with Windows XP PCs, so cache managers continuing to use the legacy ICBS have had to work with their agencies to ensure that they can hang on to a number of Windows 2000 PCs until they transition to the new ICBS.

Cache managers whose caches have not yet made the transition to the new ICBS need to communicate their Windows 2000 PC requirements to Laurie Jakubowski so she can coordinate the computer replacement with the FS IRM staff.

Will caches need to purchase user licenses for the new software?

No. The government has purchased a license that allows use of the system by any NWCG agencies, so user licenses for individual caches will not be required.

What sort of network does a cache need to run the ICBS application?

The Sterling WMS® system (application, data base and associated software components), is hosted on computers at NITC (the USDA's National Information Technology Center). The cache needs an agency network or an internet connection in order to access the system. To use wireless bar code scanning devices, a Wireless Local Area Network (WLAN) is also be required. This topic is addressed below.

PRINTING:

Will users be able to use existing cache printers to print ICBS reports?

For the most part, ICBS reports and forms print on existing printers, but because print jobs are generated by the centralized application, only networked printers are used.

Forest Service and Bureau of Land Management caches will use slightly different network architectures to perform printing. USDA, NITC, Forest Service and BLM network specialists have established and tested the printing architecture for each cache that will use the new ICBS. A solution for caches on state networks (e.g. the Alaska State Fire Warehouse in Fairbanks) will be developed on a case-by-case basis.

Are all printer makes and models supported?

Cognos® report writer and Loftware® label making software, hosted at NITC, are the actual applications that enable report, form and label printing. Network printers must be supported by these applications in order for users to print reports. There are at least twenty-five different label and inkjet printers currently in use in the national and local area caches, so it's almost certain that some printers may have to be replaced with different models.

Several ICBS reports will have been tested on a few different laser printers, using the Cognos and Loftware software, as part of ICBS-R beta testing activities. As each cache is brought online, a representative group of reports can be tested with the laser/ink jet printers in that cache, to determine whether or not they can be used with the new ICBS.

Does the ICBS-R Project recommend supported printer models?

With several caches implemented to date, all makes and models are performing fine with the Cognos® report writer and Loftware® label tool. If the ICBS-R Project Team encounters cache printers that aren't supported, we will recommend printers that are currently working well and might be available through various agency procurement sources.

Having a relatively small number of printer types will simplify the printer support model for the agencies and caches.

What sort of printers will be required to produce bar code labels, and will they be provided by the ICBS-R Project?

The project has evaluated several printers and has selected an industrial grade networked label printer (the Zebra Z4M+ and its newer version the Zebra ZM400+) to be used with

ICBS. This printer works with the two key software programs (Sterling WMS® and Loftware) and enables cache personnel to print location bar code labels and box labels with bar codes for labeling NFES items. The project procured label printers and label stock for the national caches and a few of the largest local area caches. These have been distributed to the caches that will use AIT.

Because each type of label needs to be configured in Loftware for the printer that will print it, the networked Zebra Z4M+ and ZM400+ printers are the only label printers that the project plans to support for label printing. In the long term, it is less expensive for the government to procure additional Zebra Z4M Plus printers from GSA schedule vendors than it is to support a variety of different label printers in the caches. This will also simplify the label printer support model for the caches.

Does a cache need more than one label printer?

Most caches that have implemented the new ICBS have purchased a second printer so that they can print standard 4” x 4” NFES box labels on one printer while printing 4” x 6” box labels for items with trackable ID numbers on the second printer. This eliminates the need to change label stock rolls when changing the type of print job.

Larger caches, or those with multiple spread-out operations might need more than two networked Zebra Z4M+ or ZM400+ label printers. The two models are pretty much interchangeable and share the same software driver.

How are bar-coded inventory/box labels printed?

Inventory (i.e. box) labels are printed using the inherent Sterling WMS® (ICBS) application. The out-of-the-box label has been modified slightly to include the NWCG cache identifier and a place for notes to be written if desired.

How are bar-coded location labels printed?

There is no “out-of-the-box” location label printing functionality in Sterling WMS®. Commercial enterprises that use the Sterling WMS® product either use a separate stand-alone bar code location label software product, or they order location labels from a third party provider for the initial and subsequent location labels for their warehouse/distribution centers.

During the initial cache start-up, Sterling ICBS-R Team members use the cache location spreadsheets filled out by cache personnel to generate location labels for the cache. If new or replacement location labels are needed afterwards, the application now has a customized screen that allows the user access the Loftware® software at NITC to print individual location labels for their cache.

Location labels are printed on 1” x 3”, and 1” x 6” label stock to fit the majority of shelf sizes in the cache system.

What type of label stock will I need to print bar coded box and location labels?

There are two types of label stock that the Zebra Z4M+ and ZM400+ label printers can use:

The first is **direct thermal** label stock. This type of label is the easiest type to print, and produces a good quality label initially. However, it is subject to fading in time (much like old style thermal fax machine paper) – especially when exposed to strong sunlight.

The second type is **thermal transfer** label stock. This type is a bit more complicated to use because it requires an ink ribbon (similar to the old IBM electric typewriters), but the bar code and printing is very resistant to fading in sunlight. For this reason, most caches are using this type of label stock.

What size label stock will I need to print bar coded box and location labels?

Caches use 4” x 4” label stock for most NFES box labels; and 4” x 6” box labels for those items with trackable ID numbers. The Zebra Z4M+ and ZM400+ label printers require rolls of label stock. The ICBS-R Project will provide several rolls of direct thermal label stock, purchased for this purpose, to each cache to get it started.

Can you provide sources and catalog numbers for the label stock and ribbon we’ll need to print labels?

Personnel at any cache currently using the Zebra printers can recommend box and location label stock, and thermal transfer ribbons for producing labels. While the Project does not endorse any particular brand of label stock or ribbons, here are two sources and product descriptions/catalog numbers that some caches have used:

Uline:

Thermal Transfer Ribbon: S-6258 and S-6259

Thermal Transfer Location Label: 3”x1” S-5951

Thermal Transfer Location Label: 3”x 6” S-8360

Thermal Transfer Box Label: 4”x 4” S-6254

Thermal Transfer Box Label: 4”x 6” S-5037, S-7413 (no Perforation) and S-8433 (weatherproof)

Direct Thermal Box Label: 4”x 4” S-8375

Direct Thermal Box Label: 4”x 6” S-6264

LabelMaster:

Thermal Transfer Location Label: 3”x 1” TTR620177

Thermal Transfer Location Label: 3”x 6” none listed

Thermal Transfer Box Label: 4”x 4” TTR620605

Thermal Transfer Box Label: 4”x 6” TTR620706

Direct Thermal Box Label: 4"x 6" DTR510118 (perforated) or DTR10107 (non-perforated)

BAR CODE SCANNING:

Does the re-engineered system involve bar code or other types of scanning?

Use of Automated ID Technology, or "AIT," is a requirement of the re-engineered application. A task group of cache SMEs developed AIT standards in the areas of labeling, scanning hardware and cache processes. The project utilizes the "3 of 9" (one dimensional) bar code to identify cache supply items.

Can other NWCG systems use the bar codes on cache supply labels?

The ICBS-R AIT Task Group collaborated with representatives of other projects to ensure that ICBS use of bar codes is compatible with other systems in use or being developed for use in the incident arena. Most significantly, the Incident Based Automation (IBA) Project will follow the lead of the ICBS-R project in utilizing an identical bar code labeling/scanning scheme so that the same bar code labels may be scanned at a cache and at an incident to input data into the appropriate tracking system.

Can shipments with GSA NSN bar codes be scanned into the new ICBS?

It is possible that a cross-reference table could be included in ICBS to allow cache users to scan GSA labels for encoded NSNs (national stock numbers) to facilitate the receiving function. This functionality has not yet been developed.

Is use of AIT mandatory, or can a cache get by using system printouts, notes and after-the-fact data entry as they currently do with ICBS and other systems?

The customized version of Sterling WMS® that will be deployed is a hybrid AIT/forms model, which will allow caches to do business with scanners or in a paper-based mode. However, to realize the greatest benefit from the Sterling WMS® product, implementing AIT is essential. All national caches are expected to use AIT.

Some of the local area caches may see benefits in implementing AIT, and others may not. Use of AIT in all but the largest of these caches will be looked at on a case-by-case basis during implementation. The project team plans to Beta test the use of AIT at a low volume cache in order to evaluate the potential benefits in those facilities.

What is RFID?

Radio Frequency Identification (RFID) is a form of AIT, which is coming into its own in the commercial world. Most notably, WalMart® requires its suppliers to provide RFID chips in products it sells. On the government side, the Department of Defense (DoD) is implementing RFID in a phased manner.

Why isn't RFID being implemented now?

RFID technology is still maturing and there is some question as to which standard(s) will rise to the top and become the most widely accepted in commercial or government sectors. RFID chips can carry much more data than a 1 dimensional or 2 dimensional bar

code label, but that capacity comes at a higher cost. The ICBS-R Project and national cache managers plan to implement bar code scanning first, before considering RFID technology.

Are the caches' current scanners RFID-ready?

The scanning devices that ICBS-R procured for the caches are not RFID capable, but after-market accessories are available to retrofit the devices should the caches opt to implement RFID in the future. If and when that decision is made, a cost benefit analysis would be needed to determine whether retrofitting or replacement would be the best option for the cache community.

How would RFID be implemented in the cache system?

Looking ahead, ICBS-R team members and Sterling experts feel that perhaps the most logical use of RFID in the future might be to tag sensitive, high value or trackable inventory, because of the increased amount of data that can be stored on RFID tags. A complete maintenance record for a pump or radio, for example, could theoretically be stored on an RFID tag, and could be viewed by any cache where the item was returned for refurbishment.

Is the project providing AIT Equipment for the caches?

Team members and other specialists evaluated industrial grade wireless mobile computer (scanning) devices from three leading vendors and selected a model (the Symbol MG9090G) that best meets the requirements of the cache system. In 2006 the project purchased 200 of these devices and related accessories to initially outfit the national caches and a few of the largest local area caches.

If a cache determines it needs additional AIT equipment, how will it obtain it?

Additional equipment can be purchased by the host agencies of the caches. This equipment may be available for purchase via GSA schedule. To reduce the complexity of installing, configuring and supporting the equipment, caches are asked to purchase the same make/model device (or subsequent upgrades) as the project initially purchased.

Vendors might also make AIT equipment available on a lease basis. This could help caches that experience only an occasional need to greatly expand their staffing, or to equip remote caches.

What is the expected life cycle of the AIT equipment?

The Symbol AIT devices that have been purchased for the caches are very versatile and will easily accept software upgrades in the future. The project expects these devices to be serviceable for at least eight to ten years.

How do caches obtain repair or replacement service for the AIT devices?

At time of purchase, the project obtained a 3-year service plan from Lowry Computers covering each device. Details on how to obtain repair/replacement services for the devices will be available when the equipment is deployed to each cache.

What benefits will the introduction of AIT bring to the caches?

AIT brings greater real-time accuracy of the inventory and therefore enhanced efficiency. In other warehouse/distribution center centers, introducing AIT has greatly increased inventory visibility throughout the supply chain, allowing enterprises to reduce the size of their inventory and reduce overhead costs.

The Alaska Interagency Cache has used bar code scanning for several years and has found that the number of personnel hours needed to conduct an annual physical inventory count is significantly reduced. Cache managers will also have the option to run cycle counts on specific locations in the cache, or throughout the cache on a random or selected basis. Experience in other facilities has shown that when regular cycle counting is used (e.g. to count the complete cache every 3, 6 or 12 months), inventory accuracy improves dramatically and inventory loss is significantly reduced.

What changes will be required in caches in order to implement AIT?

In order to realize the benefits of AIT, many processes that used to be input after-the-fact in a cache office are performed on the warehouse floor using a scanning device. This requires greater discipline on the part of warehouse personnel. Every time an item is moved to or from a location, an box bar code and a location bar code must be scanned and the quantity entered on the device. This is how real-time inventory visibility is achieved.

During the transition period, workers usually prefer to use hard copy printouts and keep notes as a back-up method, until they build confidence in the new AIT-based system. Experience at commercial warehouse/distribution facilities (where most of the workforce consists of a mix of permanent and temporary employees like the fire caches) has shown that people adapt to the new technology very quickly.

Will all cache processes be supported by AIT?

Almost all cache processes are AIT-enabled in the new ICBS. The most significant exception is the returns and workorder process, for which there is currently no AIT module.

Like most sophisticated warehouse management systems, the out-of-the-box Sterling WMS® has a returns component, but the complexity of processing returns in the cache system is such that a new module had to be built to accommodate it in the new ICBS. This module is not currently AIT-enabled.

Are there plans to provide AIT-enabled returns and workorder functionality?

Scanning returns from incidents, would tell managers immediately what supplies were in the pipeline and available for restocking or refurbishment. This would reduce instances of unnecessary restock orders to GSA or other vendors to meet incident needs.

Recognizing these potential benefits, the ICBS-R Steering Group has authorized the project to develop, test and deploy an AIT component for these processes as an ICBS

enhancement after the first release, but developing this module is dependent on additional project funding.

WIRELESS NETWORKS:

Will the project provide wireless networks in the caches to support the AIT devices?

In FY2007 the project received a limited amount of funding to procure wireless local area network (WLAN) equipment for all national caches and a few large LASCs. Working with agency telecommunications specialists, a three-person “ICBS-R Wireless Team” installed WLANs at each of the national caches and a couple of larger local area caches that will use AIT.

Our intention is to outfit all the caches that will be using AIT with WLANs, but funding will determine whether the project procures them or host agencies do.

What agency security requirements do the WLANs and AIT devices need to meet?

The project received USDA, Forest Service, DOI and Bureau of Land Management approval to install and use WLANs and wireless AIT devices in caches.

All appropriate security requirements (e.g. WAP2, IEEE 802.11i and FIPS 140-2) are being adhered to. Agency network specialists actually connects the WLANs to the agency networks so that the devices can communicate with ICBS. Some differences are emerging in how the FS and BLM will configure and control cache wireless networks to meet their specific requirements, but those differences should be mostly transparent to scanning device users in the caches.

FEDEX AND UPS SHIPPING:

Will there be any changes in how small parcels are shipped by caches?

One feature of the Sterling WMS® product is that it can integrate with third party parcel shipping software through the use of “Sterling Carrier Server®.” This will allow shipment information to be entered automatically into ICBS when a pickup is scheduled with a parcel service.

Caches currently use FedEx® and UPS® as their primary parcel services, and they use stand-alone software and shipping stations provided by these vendors. Eventually the project plans to implement the Carrier Server integration, so that parcel shipments can be completely scheduled in the ICBS application.

Will caches need new FedEx or UPS accounts in order to take advantage of this?

We believe that caches with existing FedEx and UPS accounts will be able to use Carrier Server software with their current accounts, but this will be explored when we get closer to doing the integration.

Will I need to replace my current parcel scale to use this function?

In 2006 the ICBS-R Project purchased Mettler-Toledo® manifest station scales for each of the main caches to enable them to use in conjunction with Sterling Carrier Server®. .

INTERFACE WITH ROSS:

What changes will the interface with ROSS bring to ICBS users?

A phase 1 interface between the two systems has already been deployed (in 2008). This is the NFES catalog interface. It's a one-way interface that allows the same catalog – stored in ICBS – to be used by dispatchers when generating supply orders in ROSS.

A significant number of supply requests are placed with caches by dispatchers. This is currently done in a variety of ways – primarily by faxing hand written supply orders, or hard copy ROSS resource orders to the caches. An interface with ROSS is being developed so that this process can be automated. Our ultimate goal is to allow ICBS users to receive and process requests electronically, without having to manually enter them into ICBS. This will include current processes such as forwarding single or multiple requests to other caches, back-ordering, substitutions, etc.

There are a number of issues that have to be resolved before this can happen. The terminology and business practices used by dispatchers and cache personnel do not align very well, and practices vary considerably from one dispatch office to another and from one cache to another. These differences run the gamut: resource order numbering format, request numbering, use of single/multiple financial codes per order or request, mandatory/non-mandatory information, shipping addresses and instructions, grouping of requests by order or issue, contact information formatting, etc.

In order to develop a workable automated solution that will work across the country, some changes to business practices will be noticeable to each ICBS user (and each ROSS user). Subject Matter Experts (SMEs) from the ICBS-R and ROSS Teams are helping developers with an interface design that will meet the needs of both communities.

Will cache personnel use ROSS to process supply orders?

No, cache personnel will use ICBS for supply orders. If caches need to order personnel or equipment for cache operations, they will follow whatever protocol exists with their local dispatch office to order those resources.

How will orders be received from ROSS?

The ROSS-ICBS interface will allow requests to be sent electronically from dispatch offices to caches. How that information will be presented in ICBS is still being designed. Receiving faxed ROSS resource orders for supplies should become a very rare occurrence.

As mentioned above, there is no nationwide standard on how groups of requests are placed by dispatch offices to caches (e.g. grouped by incident, finance code, “deliver to” location, “will pick up at cache,” etc.). A workable solution to this is being developed by the interface team.

How will caches process “direct orders” for supplies?

Caches receive a significant number of supply orders/requests directly from incidents. ICBS users will need the ability to process these even after the phase 2 ROSS interface has been implemented. The method by which these will be entered into the ICBS system will be very similar to how they are entered today.

Now that ROSS and ICBS will be interfaced, there needs to be a way to ensure data integrity between the two systems. For example, before an incident request number is generated in ICBS, the system will check against the request numbers already assigned by ROSS, so that duplicate request numbers are not assigned to different requests. Interface developers are designing a mechanism to provide this data exchange without unduly impacting system performance.

OTHER INTERFACES:

What other systems will the re-engineered system interface or exchange data with?

The ICBS-R Charter requires the re-engineered system to exchange data with the Resource Ordering and Status System (ROSS) and with the BLM’s Collection and Billing System (CBS). Work on the interface between ICBS and ROSS is now underway. We expect to have that ready for testing and deployment in 2009.

Work on an interface with CBS was put on hold in 2006 due to changes in the Treasury Department’s Pay.gov system. Because of anticipated changes to Pay.gov, technical specialists with the BLM’s National Business Center (NBC) and the Sterling ICBS-R Team studied various technical alternatives.

In September 2007, they recommended an approach of interfacing ICBS with Pay.gov directly and posting data for the CBS to retrieve, and this was approved by NIFC BLM IT Management. The Sterling ICBS-R and NBC teams have collaborated on the design, development of this solution, but it has not been built and tested – pending adequate project funding for that work.

Will ICBS interface with financial or property management systems?

The ICBS-R charter requires the new system to have the *capability* to share finance, accounting and property management data with external systems, although data exchange with those systems has not been funded or added to the project scope at this time.

Sterling WMS® conforms to industry standard “service oriented architecture” (SOA), which, in theory anyway, makes it easier for the new ICBS to exchange data with other systems. Nonetheless, integration with any system still represents a major effort.

At this time, the only interface anticipated is an interface with the DOI’s FBMS system that would enable BLM caches to use FBMS account codes and to post fire stores reports for FBMS to import.

DATA MANAGEMENT:

Why is data management important?

Moving to a centralized database within the cache system and interfacing with external systems such as ROSS make the importance of data integrity critical.

What sort of data preparation is being done prior to implementation?

Due to the decentralized nature of the legacy ICBS and InProTrak databases, data cleanup and rationalization has been a huge job. "Data cleanup" refers to making sure the data is valid, and "rationalization" is the process of identifying the commonalities among data in several different databases, and changing the data or structures to reach a standard meaningful set of data. The ICBS-R Business Requirements Team has undertaken this work in close collaboration with a primary system user in each cache.

The key focus area for data preparation has been the item catalog. Cache and team members have eliminated a significant amount of erroneous data, and have identified and eliminated scores of redundant items in the catalog. This work is ongoing.

Will data in the current ICBS system be migrated to the re-engineered system?

The ICBS-R Data Migration Plan includes migration of existing ICBS reference data to the re-engineered system. To the extent practical, reference data in InProTrak (used by the Alaska Interagency Cache) will also be migrated to the new system. Transactional data (e.g. receipts, issues, returns, work orders, inventory moves, inventory adjustments, etc.) will not be migrated to the new system.

Will historical transactional data be available for running reports, etc.?

Cache personnel often have to retrieve transactional information (e.g. issues, returns, receipts, etc.) for months or years after an incident or sale has been closed out. The ICBS-R project team has been working with the current ICBS custodians and the ICBS-R Steering Group to explore ways in which the data from the current ICBS and InProTrak can be retained for users to query once the new ICBS has been implemented.

How is data managed in the new system?

With the current ICBS and InProTrak systems, users have enjoyed the luxury of managing and working from their own cache-specific databases. As we move to a centralized model, data management will likewise have to be more centralized in order to ensure data integrity across the cache enterprise. The ICBS-R Project Team, working with input from the Sterling ICBS-R Team, has developed a data management model which provides a high level of system-wide data integrity, and provide users with the data they need to perform their work.

How is catalog data managed?

Several alternatives were explored for managing the item master catalog in the new ICBS. A huge investment has been made in catalog cleanup and rationalization prior to implementing the new system.

A very small group of “NWCG Catalog Administrators” (two to three people) will be trained to administer the ICBS item catalog. This will ensure that users will have consistent and accurate catalog to work with when they use ICBS. For this centralized model to be effective, the NWCG Catalog Administrators will need to provide very responsive service to the ICBS users. It is suggested that a service level agreement (SLA) with performance metrics be developed and implemented in the cache community.

What about cache-specific catalog attributes?

Another ICBS user role, “Cache Catalog Administrator,” is available to cache personnel. This role will have the authority to add, modify, and delete cache-specific attributes of the item master catalog items. This role is necessary due to the requirement in some caches – specifically state-hosted facilities – to track some cache-specific costs and other attributes for each catalog item.

How are local items managed?

A concern of ICBS users is the management of cache-specific or “local items.” To ensure data integrity and eliminate redundant items in the new centralized system, all catalog items, including what were known as “local items” in the legacy ICBS, are managed by “NWCG Catalog Administrators.”

How is organizational data managed in the new system?

To answer this question, we need to provide some background on the new NESS system. The new ICBS is one of several fire and aviation systems that make up the National Enterprise Service System (NESS) architecture at NITC. Other systems include FPA (Fire Program Analysis), ROSS (Resource Ordering and Status System), FAMWEB, FAM Data Warehouse, I-Suite, and the NWCG OIS (Organizational Information System).

One aspect of NESS is for these closely related “fire” applications to share data (like organizations) that is common to more than one system. This ensures data integrity between systems and reduces the overall costs of system hardware. For example, rather than having a record of the Boise National Forest and all its attributes (e.g. NWCG Unit ID, agency, region/area, shipping address, billing address, geographic location, etc.) in the database of each application, one copy can be housed in NESS and each application can use the same record for its purposes.

As part of the long-term strategy to move toward a centralized NESS organizational repository, which provides this data to several information systems, organizational data will need be centralized and tightly managed in ICBS.

Currently in the new ICBS, users access organizational data in the ICBS database because the NWCG OIS (Organization Information System) has not yet been deployed at NITC. The ICBS database has been populated with master data on as many organizations (e.g. customers, vendor/suppliers, etc.) as is available. This includes data for most all wildland agency organizations for which the NWCG has information.

How valid and how complete is this organizational data?

Just prior to ICBS being deployed in 2008, it was loaded with a base set of customer and vendor/supplier records. As part of the preparation to bring each cache online, any additional local customer and vendor/supplier records are entered by an NWCG System Administrator.

Will the organizational data I need be in the new system?

Because the ICBS and ROSS systems will eventually be interfaced and sharing organizational data, it's critical that valid and consistent data is used in the two systems. Management of organizational data in the ROSS and ICBS systems is limited to a very small number of users ("NWCG Catalog Administrator" user group) to ensure that when ROSS and ICBS are interfaced in a subsequent release, data integrity between the systems will be maintained.

That said, users must have a way to ensure additions, deletions and changes can be made in a timely manner in order for them to perform their jobs (e.g. personnel from the Six Rivers National Forest notify the Northern California Cache that its shipping address has changed). The project suggests that a service level agreement (SLA) with performance metrics be developed and implemented so that users' needs will be met by the group that performs this service.

How will the OIS affect ICBS?

Under the direction of the NWCG, an OIS team has been building a master database of organizational information gleaned from several existing "fire" systems databases. This database currently contains over 1,900 organizations. A large data cleanup and rationalization process, similar to that which ICBS users have been doing, is being performed by the OIS team to ensure that the highest quality data is available. This data preparation work has been underway for over three years.

The OIS will replace the current NWCG Unit ID Repository, and will be much more robust, however ICBS users will have to provide some attributes that currently are incomplete in the database (e.g. shipping addresses).

The OIS will not contain vendor organizations. In the future, another repository which is focused on Vendor Information will be developed.

Who will maintain OIS data?

Data corrections to organization data will be through a single point of contact. Information on how this will be done has not yet been finalized.

CONTINUITY OF OPERATIONS AND DISASTER RECOVERY:**How will caches continue to operate ICBS if they lose their network connection?**

Generally speaking, if a cache has a separate high speed connection available (such as DSL, cable, wireless air card, other-agency network) users can continue to access the system if their primary agency network is out.

One alternative for Forest Service caches is national dial-up modem pools that can be accessed via a cache computer with a modem and a phone line. Application performance via a dial-up connection might be unacceptably slow, so it should be tested at a cache before it's needed.

For BLM caches, the network specialist at NIFC suggests there could be several alternatives (e.g. dial-up from stand-alone-PCs, back-up connectivity provided for co-located coordination centers, wireless air cards, etc.). She recommends that BLM cache personnel contact the network support staff at their respective state office for advice. The network staff should know what is available and be able to offer alternatives for the specific sites. Likewise, for state agency caches, an agency network specialist should be able to develop cache-specific alternatives.

If a cache completely loses connectivity, accessing the ICBS system would require some employees to relocate to an alternate site (e.g. a hotel, library, school, other office, etc.) to access the internet and the ICBS application. As for the wireless scanning guns they will not work if the agency network goes down, so tasks will need to be completed using just the ICBS console.

Those caches with access to the internet via more than one network should test each one and identify opportunities for backup connectivity. Each cache should document and test their specific backup capability as part of its preparation for implementing ICBS.

What about going back to paper-based processes?

Operating with paper forms as a contingency is another option. Many caches currently use this approach when they lose power or access to their legacy ICBS server. The Implementation Team has developed a Continuity of Operations Plan (COOP) template, in the ICBS-R Implementation Plan. As part of its pre-implementation steps, each cache completes a COOP identifying various contingencies. Team members are available to assist in this process.

TESTING:

How is and was the re-engineered application tested?

The system developer conducts comprehensive configuration management and internal testing. Once internal testing has been completed on each portion of the application, cache SMEs conduct beta testing of that portion using realistic scenarios and data.

Project team members, who are fulltime cache personnel, developed several hundred test cases for beta testing. Each test case was run in a “double blind” manner with two or more testers. Defects were then noted, corrected and retested – again in a “double blind” manner. The product has gone through extensive structured testing prior to being implemented in the cache community. As additional functionality is developed, the same structured testing methodology is used.

Performance testing has also been done to ensure that the servers on which the application is installed are sized and tuned for maximum system performance and responsiveness. This will be repeated as more caches come on board the system.

TRAINING:

How is training on the re-engineered application being provided?

Ready access to high quality training has always been a big issue for the cache community. The ICBS-R Project Charter requires the project to develop formal and online user training. Various options have been explored for best preparing ICBS users.

Because caches have an ongoing need to train users (e.g. seasonal/AD/EFF employees coming on board at different times of the year), the Implementation Team has determined that on-demand “e-learning” will best meet the needs of ICBS users. This type of training product can be updated as needed and available to anyone with an internet connection.

The Sterling Carrier Server® product itself comes with standard eLearning modules. Because caches are using a highly modified version of Sterling Carrier Server®, the project has invested in a customized version of the Sterling Carrier Server® eLearning tool.

The eLearning module can be accessed pretty much whenever a user needs training by clicking the “Training” link on the ICBS-R Project website:
<http://icbs.nwcg.gov/Traininig/elearning/> An “E-Learning” button on the ICBS application itself will also take a user to the training module.

Is classroom training also an option?

The project team knows that most Cache Managers prefer formal classroom style training sessions provided for their users. This training is included in the implementation process at each cache. Classroom lesson plans, PowerPoint presentations, the eLearning tool, access to the ICBS “Training” instance, along with PCs with an internet connection and wireless scan guns connected to the WLAN, are the basis for this training.

USER SUPPORT:

What sort of support is available for users?

A user support organization, “Interagency Helpdesk Services,” operated by BAE Systems®, was trained, staffed and launched in early 2008 in conjunction with the first cache being implemented on the new system. ICBS users’ primary method for contacting the ICBS Helpdesk is by phone (1-866-224-7677). The Helpdesk website (<http://rosshelp.digitalnet.com/>) also has a number of resources available to the user, including a “Knowledge Base” of solutions to common user problems.

IMPLEMENTATION SCHEDULE:

How was the implementation sequence determined?

The ICBS-R Implementation Team Leader, working with the Sterling Team, developed an ICBS implementation plan and deployment strategy. They determined that implementing the system at all national caches first brings the greatest initial benefit to the overall cache community.

Several factors were considered in determining the sequence of roll-out at national caches (e.g. historical incident activity, size, workload, any special inventory variations, refurbishment processes, staffing, physical inventory schedule, proximity to major Lower 48 airport hub, IT infrastructure, etc.). Based on the above factors, the team selected the Rocky Mountain Cache (RMK) to be the first cache to implement the new ICBS. Preparation began in November 2007 following the completion of system beta testing, and implementation was completed in the spring of 2008 at RMK.

The Prescott Cache (PFK), Southern Area Cache (SAK), Northeast Area Cache (NEK) and Silver City Cache (SFK) were implemented in late 2008.

What is the sequence for implementing the remaining national and local area caches?

Following Silver City Cache, the next three caches scheduled for implementation are the Northern California Cache (NCK), Southern California Cache (LSK) and Northern Rockies Cache (NRK).

The sequence for the remaining caches after these three has yet to be determined. Planned changes in facilities in two of the three Northwest Area caches, changes needed to adapt ICBS to the new BLM FBMS financial system, and the level of cache incident support activity in 2009 are factors that will determine which caches are implemented after NRK.

If these factors prevent implementation at the remaining national cache facilities, the team will instead implement the local area cache facilities.

When and how will local area caches be implemented?

Following successful implementation at the national caches, ICBS will be rolled out to the local area support caches. During that phase, national cache personnel who are familiar with ICBS can help coach users in the LASCs.

CACHE PREPARATION:

What have the cache managers done to prepare for implementation of the new ICBS?

Cache personnel have already taken significant steps to prepare for implementation by working with the project team on such things as: requirements documentation; providing cache diagrams; working with the ICBS-R Wireless Team on wireless LAN installation; adopting a common warehouse zones and a location numbering scheme and providing information on existing hardware like PCs, printers and networks. The caches have also

worked closely with the Business Requirements team on ICBS data cleanup and rationalization.

Here are

What can a cache manager do to prepare his or her cache for implementation?

The advanced work (“pre-implementation activities”) requires close coordination with the ICBS-R Implementation Team. Some specific types of pre-implementation tasks include:

- Working with the ICBS-R Team to develop a specific zone and location numbering plan based on the scheme that the national cache managers have adopted
- Providing information to the team on the networked printers that will be used with the new system, such as: make and model and IP address
- If the need for new or additional printers is identified, working with agency procurement personnel to purchase the printers
- Working with the team and local IRM specialists, if any, to test the wireless local area network (WLAN) that will support wireless bar code scanning
- Identifying the need for any additional wireless scanners, and procuring them through agency procurement personnel

What sort of things does a cache need to do just prior to implementation?

As we get closer to rolling out the new system at your cache, Sterling and government team members will need to work with your personnel to prepare the cache for implementation. This will involve: providing the team with information on your storage locations, what items you store in each location; location and inventory labeling; setting up zones and locations for your cache in the ICBS database; entering cache-specific inventory rules in ICBS; making any desired inventory movements prior to implementation; conducting a complete physical inventory of each location in your cache just prior to “going live;” testing networked laser printers; configuring and testing label printers; and deploying and testing scanning devices on the WLAN.

A big part of the implementation process that cache personnel perform is filling in spreadsheets with data that will be loaded into the system prior to implementation (e.g. local items, local suppliers, inventory data, etc.).

When should caches adopt the new standard location numbering?

In anticipation of ICBS implementation, most national caches have already developed the new numbering system for their cache, and have posted the new numbers along side the old numbering so that cache personnel could begin familiarizing themselves with them. Most cache managers have opted not to change locations in their legacy system (e.g. ICBS, InProTrak, WRAP, etc.) to the new numbering, but rather will wait until the new ICBS is implemented at their cache.

Will we need to move any of our inventory around in the warehouse?

We don’t anticipate the need for caches to have to move their inventory prior to implementation. However, within any given storage zone, cache managers can consider

moving some of their fast moving (“high velocity”) items, and items that they like to load first on pallets (e.g. heavy, bulky or flat items) to lower-numbered picking locations.

The new ICBS system will generate tasks based on most efficient picking and put-away locations, so this strategy can help maximize the potential of the system. We have learned more on how to take advantage of this as we’ve brought the first several caches onboard the new system. The ICBS-R Implementation Team will share these “best practices” with personnel from each subsequent cache as it’s implemented.

What else can we do to prepare?

Future users of the new ICBS can keep in touch with ICBS-R team members in their geographic area and visit the ICBS-R website (<http://icbs.nwcg.gov/>) on a regular basis to keep up on project developments.

What can we do to help bring other caches implement the new system?

After cache personnel have been trained and become familiar with the use of the new ICBS, it will be very helpful if those with the talent for instructing and coaching can assist the ICBS-R Implementation Team in training and assisting personnel in the local area caches.

What can we do to help support other caches that are using the new system?

After cache personnel have been trained and become familiar with the use of the new ICBS, they can they can share this knowledge and help their co-workers in other caches. It will be particularly helpful for trained users to be available for assignments in caches that are experiencing high incident support activity. Similarly, cache personnel are encouraged to take cache assignments at those caches that are using the new system so they can begin learning the new system.

LONG-TERM MAINTENANCE:

What are the plans for long-term support of ICBS?

Operation and maintenance (O & M) of the system has to be provided throughout its life span. Because ICBS is based on a commercial product, the core product will be maintained by Sterling Commerce, however fixes, patches, and periodic upgrades will have to be tested and applied to the “NWCG version” of the product, which is ICBS.

The Project Team has projected a ten year budget plan to operate and maintain ICBS. Approval of this budget each year is the responsibility of the NWCG “managing partner agency,” which is the Forest Service.

What does Operations and Maintenance (O & M) entail?

Operations and Maintenance include such items as day-to-day systems administration, which is the responsibility of the staff at NITC; testing and applying fixes, upgrades and new releases, which is the responsibility of an ICBS O&M contractor still to be hired;

and routine data administration, which is the responsibility of ICBS users with those roles (i.e. NWCG and Cache Data Administrators; NWCG and Cache System Administrators). O & M also includes change management activities.

How are change management items addressed?

During development of the system, the ICBS-R Project Team, which is mainly comprised of cache personnel, is responsible for determining which “change items” are high or low priority. The team addresses just those items that are within the project scope, as outlined in the ICBS-R Charter.

Prioritizing out-of-scope change items, including enhancements, is the responsibility of the ICBS-R Steering Group. These change requests are compiled by the ICBS-R Project Team and presented to the Steering Group. If funding beyond what has been budgeted is required to complete this work, the Steering Group is charged with obtaining it from the appropriate agency.

Any change/enhancement request that is approved and funded by the government will be developed, tested and deployed by the ICBS-R O & M contractor in collaboration with government subject matter experts (SMEs).

How can ICBS users submit change requests to the project?

A “Suggestions/Change Requests” link has been posted on the ICBS-R Project website (<http://icbs.nwcg.gov/suggestion.html>) for users to submit change requests.

Once ICBS has been implemented in the Cache Community, who will be responsible for change management?

An ICBS Change Management Board, with representatives from the cache community, will be designated by the ICBS-R Steering Group to manage the change management process. As long as an ICBS-R Project Team exists, a representative from that group will also be part of the ICBS board.

The Change Management Board will meet at least twice a year, review the Change Requests submitted to the board, and determine which work will be completed.